Drug-Resistant TB in Children

Why in news?

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Foundation for Innovative New Diagnostics (FIND) conducted TB diagnostic tests in collaboration with the Central TB Division under the Revised National TB Control Programme (RNTCP).

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What are the highlights of the FIND study?

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- Of over 76000 children tested in nine cities 5,500 have TB.
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- 9 percentage children have Multi-Drug TB.
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- 6 percentage are the proportion of children among new TB patients in 2016.
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- MDR TB in children is common in settings where it is common in adults.
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What is MDR-TB?

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- Multi-drug-resistant tuberculosis (MDR-TB) is a form of tuberculosis (TB) infection caused by bacteria
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- It is resistant to treatment with at least two of the most powerful first-line anti-TB medications (drugs), **isoniazid** and **rifampin**.
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How MDR-TB diagnosis is done in children?

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- Clinical examination
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- Tuberculin skin test
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- Bactereological confirmation
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- HIV testing
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What challenges were faced?

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- Absence of appropriate samples coupled with decentralised capacity to get good samples from children to test for TB remains a challenge in paediatric TB case detection.
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- The paediatric MDR-TB cases had not been documented so far.
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- TB diagnosis in children is complicated due to challenges associated with sample collection and poor sensitivity of tests like the Acid fast bacilli (AFB) smear.
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- FIND, through this project, has collaborated with the Central TB Division to improve access to more sensitive diagnostic tools like the GeneXpert in the paediatric population.
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What is GeneXpert?

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- GeneXpert is a diagnostic tool to diagnose TB.
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- The test is used with an automated molecular diagnostic platform that enables the diagnosis of TB and some drug-resistant TB (DR-TB) in less than two hours.
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- GeneXpert testing was performed free of cost for all presumptive

paediatric TB and drug-resistant TB patients (aged under 15 years).
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Quick fact

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Revised National TB control programme

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- Revised National Tuberculosis Control Program (RNTCP) is the state-run tuberculosis (TB) control initiative of the Government of India.
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- As per the **National Strategic Plan 2012–17**, the program has a vision of achieving a "TB free India", and aims to achieve Universal Access to TB control services.
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Source: The Hindu

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